

GOVERNOR

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

P.O. Box 94245

Baton Rouge, Louisiana 70804-9245 www.dotd.la.gov 225-379-1485

June 22, 2009



STATE PROJECT NO. 695-06-0004 FEDERAL AID PROJECT NO. 20-4(049)174 REST AREA IMPROVEMENTS, 1-20 AT MOUND ROUTE i-20 MADISON PARISH

SUBJECT: ADDENDUM NO. 5 (CONSTRUCTION PROPOSAL REVISION)

ELECTRONIC BIDDING AMENDMENT NO. 1

Gentlemen:

The following proposal revisions dated 06/22/09 on the captioned project for which bids will be received on Tuesday, June 30, 2009 have been posted on http://www.dotd.la.gov/cgi-bin/construction.asp.

- 1. Deleted the special provision entitled S-001, Rest Area Improvements, I-20 at Mound.
- 2. Added the special provision entitled NS-MSC-00260, Rest Area Improvements, I-20 at Mound. (1 page)
- 3. Added the following specifications to the Project Manual: (7 pages)
 - a. Section 02700, Site Improvements, Subsection 2.02 Pre-Manufactured Buildings.
 - b. Section 04810, Subsections 2.2 Brick, 2.3 Mortar and Grout Materials, 2.4 Reinforcing Steel, and 2.5 Masonry Joint Reinforcement.
 - c. Section 03450, GFRC Columns.
- 4. Revised the Schedule of items as follows: (1 page)
 - a. Deleted Item S-001.
 - b. Added Item NS-MSC-00260.

Please note these revisions in the proposal and bid accordingly. Mandatory electronic bidding is required for this project, and electronic bids and electronic bid bonds must be submitted via www.bidx.com for this letting date.

Sincerely, Yantal Sander

RANDAL D. SANDERS, P. E.

CONTRACTS & SPECIFICATIONS ENGINEER

Attachments

ec: Mr. Brian Buckel

Mr. John Kelley

Mr. Bill Stodghill

Mr. Trey Jesclard Mr. Curtis Fletcher

Mr. Eric Burges

Mr. Masood Rasoulian

NS-MSC-00260, REST AREA IMPROVEMENTS, I-20 AT MOUND: This item consists of furnishing and constructing all building, parking area, acceleration and deceleration ramps, drainage, utilities, site amenities, landscaping, complete and all in accordance with the plans and plan details, the Project Manual for REST AREA IMPROVEMENTS, I-20 AT MOUND and as directed by the Project Engineer.

Payment will be made under:

Item NS-MSC-00260, Rest Area Improvements, I-20 at Mound, per lump sum.

Specifications Section 02700 Site Improvements, Sub-section 2.02 Pre-Manufactured Buildings.

"Roof decking shall be as specified in Specifications Section 07311 and matching the design of the new Public Restroom building."

Covered walkways shall be built as shown in plans and manufactured by Poligon Park Architecture or approved equal and shall have the same style (i.e. shingles, etc.) as buildings.

Building structure(s), covered walkways, foundations and concrete pad shall be in accordance with the Drawings. All pre-manufactured structures shall be designed, manufactured and installed as per manufacturer's recommendations, and accordance with all applicable codes, and as detailed on the Drawings. Contractor shall submit for approval detailed shop drawings of all material required to complete the project. No material may be delivered to the job site or installed until receipt of the approved shop drawings.

2.2 BRICK

- A. General: Provide shapes indicated and as follows for each form of brick required:
 - Provide units without cores or frogs and with exposed surface finished for ends of sills
 and caps and for similar applications that would otherwise expose unfinished brick
 surfaces.
- B. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
 - 1. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
 - 2. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- C. Face Brick: ASTM C216, Grade SW, Type FBS, and as follows:
 - 1. Initial rate of absorption: Less than 20g/30sq.in. per minute when tested per ASTM C67.
 - 2. Efflorescence: Provide brick that has been tested according to ASTM C67 and is rated "not effloresced".
 - 3. Size: Manufactured to the following actual dimensions:
 - Modular: 3-1/2 to 3-5/8 inches wide by 2-1/4 inches high by 7-1/2 to 7-5/8 inches long.
 - 4. Application: Use where brick is exposed, unless otherwise indicated.
 - 5. Color and texture: As selected from manufacture's standard colors and textures.
 - 6. Products: Subject to compliance with the requirements set forth in these specs, provide one of the following:
 - a. Boral Bricks
 - b. Acme
 - c. Approved equal by architect

2.3 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of portland cement complying with ASTM C 150, Type I or Type III, and hydrated lime complying with ASTM C 207.
- D. Mortar Cement: ASTM C 1329.
- E. Masonry Cement: ASTM C 91.

- 1. For pigmented mortar, use a colored cement formulation as required to produce the color indicated or, if not indicated, as selected from manufacturer's standard formulations.
 - a. Pigments shall not exceed 10 percent of portland cement by weight for mineral oxides nor 2 percent for carbon black.
 - b. Pigments shall not exceed 5 percent of mortar cement or masonry cement by weight for mineral oxides nor 1 percent for carbon black.
- 2. For colored-aggregate mortar, use natural color or white cement as necessary to produce required mortar color.
- F. Aggregate for Mortar: ASTM C 144; except for joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
- G. Aggregate for Grout: ASTM C 404.
- H. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortar.
- Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494, Type C, and recommended by the manufacturer for use in masonry mortar of composition indicated.
- J. Water: Potable.
- K. Products: Subject to compliance with requirements, provide one of the following:
 - Colored Portland Cement-Lime Mix:
 - a. Eaglebond; Blue Circle Cement.
 - b. Rainbow Mortamix Custom Color Cement/Lime; Holnam, Inc.
 - c. Centurion Colorbond PL; Lafarge Corporation.
 - 2. Cold-Weather Admixture:
 - a. Accelguard 80; Euclid Chemical Co.
 - b. Morseled; W. R. Grace & Co., Construction Products Division.
 - c. Trimix-NCA; Sonneborn, Div. of ChemRex, Inc.

2.4 REINFORCING STEEL

A. Uncoated Steel Reinforcing Bars: ASTM A 615/A 615M; ASTM A 616/A 616M, including Supplement 1; or ASTM A 617/A 617M, Grade 60.

2.5 MASONRY JOINT REINFORCEMENT

A. General: ASTM A 951 and as follows:

04810 - 8/16

SECTION 03450 – GFRC COLUMNS

PART 1 - GENERAL

1.01 SCOPE:

Furnish all labor, materials, equipment and services necessary or incidental to completion of molded glass fiber reinforced concrete composites (G.F.R.C.) and associated work in accordance with the contract documents and all applicable building codes.

1.02 WORK INCLUDED:

- A. Manufacturer to provide all labor, materials equipment and related services required for the fabrication of G.F.R.C. shapes as shown in the contact documents. (Columns for new restroom building and picnic pavilions on site)
- В. Installer to provide all labor, materials, equipment and related services required for complete erection of the G.F.R.C. and joint treatment required.

1.03 RELATED WORK SPECIFIED ELSEWHERE:

- Division 5 "Structural Steel" A.
- B. Site work "Pre-Fab Pavilions"
- C. Division 9 " Painting"

RELATED WORK SPECIFIED ELSEWHERE: 1.04

- A. Aristone Designs, Inc.
- В. Melton Classics
- C. Architectural Pre-Cast, Baton Rouge, LA

1.05 SUBSTITUTIONS:

Manufacturers desiring consideration other than those specified must submit data, samples and certified testing reports showing compliance to all guidelines set forth in the G.F.R.C. Specification ten days prior to the bid date. Must have several years experience in manufacturing G.F.R.C.

1.06 **SUBMITALS**

- Samples: Submit three (3) 9" x 9" flat samples for paint and finish section. A.
- B. Submit shop drawings for approval showing plans, sections, details, joint treatment, reinforcing fastening devices and relation to adjacent construction as required.
- C. Manufacturer to provide one full size mock-up (specify piece) to the jobsite for installation and review.

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PART 2 – PRODUCTS

2.01 MATERIALS:

- Glass Fiber Reinforced Concrete (G.F.R.C) to be fabricated using long strand continuous A. glass fiber mats laminated with polymer modified Portland Cement.
- В. Embeds and reinforcement (if required by manufacturer) to be galvanized steel.
- C. Miscellaneous materials:
 - All other materials, i.e. screws, clips, adhesives, shims, hangerwire, etc., to be per 1. manufacturer's shop drawings and/or job specifications and shall be supplied by installer of G.F.R.C. materials.

2.02 PHYSICAL PROPERTIES:

1.	Glass fiber	= 5-6% by weigh
1.	CHASSITOOL	S 070 by Weigh

3.	Weight	$= 4 lbs./ft. \pm$

7. Flexural strength (ASTM D790)
$$= 2590$$

8. Compressive strength (ASTM D695)	= 9520
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9. Impact (D256) = 12.51 ft. lbs./in.

2.03 **TOLERANCES:**

1	Dimension- all directions	± 3/16"
1 -	Differsion an directions	2: 3/10

3/8"min - 3/4" max ± 2. Thickness 1/8"

3. Warpage or bowing 1/16" per foot

PART 3 - EXECUTION

3.01 DELIVERY, STORAGE AND HANDLING:

- A. Delivery and Handling:
 - All G.F.R.C. materials shipped to be placed in specially built crates or pallets, 1. and shipped in a manner that will protect the pieces from damage, dirt, moisture and warpage.
 - Support pieces during shipment on nonstaining shock absorbing materials. 2.

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3. Lift and support pieces only at points indicated for attachment on drawings.

В. Storage

- 1. Once uncrated, material to be stored in an upright position on a flat, smooth and level surface. Avoid stacking and leaning of pieces as much as possible.
- 2. Cover and protect pieces from excessive dirt, moisture, surface damage or other jobsite hazards.

3.02 INSPECTION:

- A. Contractor shall be responsible for inspecting job conditions and providing lines, centers, grades and marks in sufficient detail for correct installation.
- B. Installers will verify all marks and check jobsite conditions for clearance, working space and all marks provided before commencement of installation. Installer will also inspect all pieces prior to installation. Installer will be responsible for repairing all installed pieces except manufacturing defects. All discrepancies affecting the installation of the G.F.R.C. members will be brought to the attention of the General Contractor and resolved before the installation begins.
- C. General Contractor to provide sufficient space for unloading and transport of pieces as required.

3.03 **ERECTION**

- A. Safety: installer is responsible for handling and installing the G.F.R.C. material in a safe manner. Report and unsafe conditions immediately to the General Contractor.
- В. Installer will use experienced workmen to install the G.F.R.C. pieces. Materials will be installed level and plump and as shown in the approved shop drawings. All pieces will be securely anchored and joints finished as shown in the approved shop drawings.
- C. The installer will protect the G.F.R.C. members from damage by other trades during construction and until accepted by the General Contractor.
- D. After erection and acceptance of finished pieces, all damage and repair will be the responsibility of the General Contractor.

3.04 TAPING, PATCHIN AND CONTROL JOINTS:

- A. Exterior tape and bed joints are to be attached with an exterior grade construction adhesive. Then taped and floated using fiberglass mesh tape and a bedding compound of Portland cement, bonding agent, water and fine washed silica sand (sand omitted in finish coats) and clean the joint to match piece surface and shape.
- В. Countersunk fasteners and damage are to be patched using same bedding compound as used to float joints.

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C. Control joints or exposed joints to be filled with appropriate backer rod and a sealant (Dow Corning 795 or Soneborn NP-1 or equal) capable of withstanding ±25% joint movement.

3.05 FINISHING:

See Painting/Coating Section of Specifications. G.F.R.C. is shipped as a Natural Portland/Gray color. Field finishing is required and should be treated as a masonry/concrete product.

PART 4 - WARRANTY

All pre-cast products shall be covered by a one-year warranty against defects in material and workmanship starting at substantial completion of the project.

END OF SECTION

S-002 S-004

(Rev. 06/22/09)



Louisiana Department of Transportation and Development

Proposal Schedule of Items

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Contract ID: 695-06-0004

Project(s): 695-06-0004

SECTION: 1

General Items

Proposal Line Number	item(ID)	Description Unit Price (In Words, Ink or Typed)	Approxir Quanti	nate Unit ty of Measure
0001	NS-MSC- 00260	Rest Area Improvements, I-20 At Mound		LUMP SUM
				Dollars
				Cents
		Section: 1	Total:	***************************************
			Total Bid:	·